IN THE CLAIMS

Please amend the claims as follows:

Claims 1-19 (Cancelled)

(Currently Amended) A method comprising:

consecutively receiving at and writing into a memory a sequence of groupings of bits from a data stream, the groupings of bits having a predetermined size;

reading from the memory a subset of the sequence of the groupings of bits written into the memory, the subset having fewer groupings of bits than the sequence of groupings of bits written into the memory;

applying the subset to a first multiplexer (MUX);

applying another data stream to a <u>thirdsecond MUX</u>, the another data stream comprising bits representing a virtual local area network (VLAN) tag; and

selectively applying to a <u>secondthird</u> MUX the subset applied to the first MUX and <u>the</u> another data stream applied to the <u>thirdsecond</u> MUX.

21. (Previously Presented) The method of claim 20, wherein:

the memory comprises a first in, first out (FIFO) memory; and

the reading is based upon a read pointer generated by a state machine.

22. (Previously Presented) The method of claim 21, wherein:

the state machine also generates a first MUX select signal, a second MUX select signal, and a third MUX select signal applied to the first MUX, the second MUX, and the third MUX, respectively.

23. (Currently Amended) An apparatus comprising:

a memory capable of consecutively receiving and storing a sequence of groupings of bits from a data stream, the groupings of bits having a predetermined size, the memory also being capable of retrieving a subset of the sequence of the groupings of bits written into the memory,

the subset having fewer groupings of bits than the sequence of groupings of bits written into the memory; and

a first multiplexer (MUX), a second MUX, and a third MUX;

the apparatus being capable of applying the subset to the first MUX, applying another data stream to the thirdseeond MUX, and selectively applying to a second-third MUX the subset applied to the first MUX and another data stream applied to the thirdseeond MUX, the another data stream comprising bits representing a virtual local area network (VLAN) tag.

24. (Previously Presented) The apparatus of claim 23, wherein:

the memory comprises a first in, first out (FIFO) memory; and

the apparatus also comprises a state machine to generate a read pointer, the memory being capable of retrieving the subset based upon the read pointer.

25. (Previously Presented) The apparatus of claim 24, wherein:

the state machine is also capable of generating a first MUX select signal, a second MUX select signal, and a third MUX select signal to be applied to the first MUX, the second MUX, and the third MUX, respectively.

26. (Currently Amended) A system comprising:

an integrated circuit comprising:

a memory capable of consecutively receiving and storing a sequence of groupings of bits from a data stream, the groupings of bits having a predetermined size, the memory also being capable of retrieving a subset of the sequence of the groupings of bits written into the memory, the subset having fewer groupings of bits than the sequence of groupings of bits written into the memory; and

a first multiplexer (MUX), a second MUX, and a third MUX:

the integrated circuit being capable of applying the subset to the first MUX, applying another data stream to the https://doi.org/10.1016/j.ceeond MUX, and selectively applying to https://doi.org/10.1016/j.ceeond MUX, and selectively applying to https://doi.org/10.1016/j.ceeond MUX, and another data stream applied to the

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third-second MUX, the another data stream comprising bits representing a virtual local area network (VLAN) tag.

 (Previously Presented) The system of claim 26, further comprising: an input data bus coupled to the memory.